

Common Measure: Technology, Adults

Instrument: Computer Attitude Questionnaire

Scale: Self-efficacy with computers

Developers: G. Knezek and other researchers at the Texas Center for Educational Technology.

Year: 1997 (Versions 5.14); previous versions from mid-1990s

Target Audience(s): Adults

Language other than English available: Japanese, Spanish

Type: Attitude

Data collected: Quantitative

Data collection format: Self report – Pre/post

Reading Level: Flesch-Kincaid grade level: 4.4

Existence of test/technical manuals, user guides, and supplemental materials: Technical manual includes latest version of instrument, reliability, administration procedures, scoring and references. Technical Manual: <https://iittl.unt.edu> For use contact It-iittl@unt.edu

Level of training necessary for administration/scoring/interpretation: None necessary for administration. Some knowledge of measurement (i.e. reverse scoring) and statistical software packages (i.e. SPSS) helpful for scoring.

Widespread Use/Professional Endorsements:

- Listed on CYFERnet; Knezek, G. and Christensen, R. (1997). Denton, TX: Texas Center for Educational Technology. Knezek, G. and Christensen, R. (1995).
- Denton, TX: Texas Center for Educational Technology. ; Knezek, G., Christensen, R., and Miyashita, K. (1998).
- Knezek, G. and Miyashita, K (1994). A preliminary study of the Computer Attitude Questionnaire. In Knezek, G. (Ed.) Studies on children and computers: The 1993-94 Fulbright Series.

Cost of Use: No cost is associated with the use of this survey. Developers request that users give proper credit to their source(s), and share with the authors and others the results of their findings.

Description:

- The CAQ is designed to measure attitudes (feelings toward a person, or thing) and prevailing attitudes (dispositions).
- 67-item, 4-point Likert-type self-report questionnaire with 3 paired comparison items, designed to be used with students in the fourth through eighth grades.
- The Likert-type questions measure six psychological dispositions (subscales): Computer Importance, Computer Enjoyment, Motivation, Study Habits, Empathy, and Creative Tendencies.
- The CAQ Subscales can be used separate from instrument.
- 8 items measure Self-efficacy/self-confidence/outcome expectancy beliefs towards technology.

Psychometrics:

Information on reliability and validity are provided below. If information on a particular psychometric was not found, it is indicated as “no information provided.” It should be noted that this is not necessarily an indication of a lack of reliability or validity within a particular scale/instrument, but rather a lack of rigorous testing, for various reasons, by the developers or other researchers.

Reliability: *A correlation of at least .80 is suggested for at least one type of reliability as evidence; however, standards range from .5 to .9 depending on the intended use and context for the instrument.*

Internal Consistency (Subscales): (from 1998) Computer Importance (.82); Computer Enjoyment (.82); Study Habits (.82); Empathy (.87); Motivation(.80); Creative Tendencies (.86); Anxiety (.84); Seclusion (.81).

Internal Consistency (For Paired-Comparison Items): (from 1993—assumed by developer to be similar to YCCI) Computer Preference (.90), Computer Difficulty (.89), and Computer Learning (.92).

Inter-rater reliability: No information provided

Test-Retest: No information provided

Validity: *The extent to which a measure captures what it is intended to measure.*

From instrumentation study on the CAQ by Knezek and Miyashita (1994):

Content/Face Validity: Content validity for the CAQ is believed to be quite high. It was based heavily on the Young Children’s Computer Inventory (YCCI). Approximately one dozen researchers, early childhood specialists, teachers, and parents contributed their expert judgments to the selection and wording of items for the YCCI.

Criterion Validity: None reported specifically for the CAQ; evidence from analyses of variance and discriminant function results indicated that the YCCI possessed an acceptable degree of criterion-related validity.

Construct Validity: Factor analyses have been conducted resulting in 6 meaningful subscales (Version 5.14) .The YCCI construct validity has been found to be stable over time, and reasonably consistent across cultures.